

U.S. Patent Application Serial No. 10/073,316
Response to Office Action dated December 11, 2003

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claims 1-5 (canceled).

Claim 6 (previously presented): The semiconductor device as claimed in claim 18, wherein the noise reduction condenser of said condenser chip is formed by a MOS capacity.

Claims 7-8 (canceled).

Claim 9 (previously presented): A semiconductor device comprising: a first semiconductor chip having a circuit block, a power supply line and a ground line; and a second semiconductor chip stacked on said first semiconductor chip, wherein said first semiconductor chip has at least one first electrode pad separated from a circuit formed within said first semiconductor chip;

 said second semiconductor chip has at least one first electrode pad separated from a circuit formed within said second semiconductor chip; and

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an inductor connected to at least one of said power line and said ground line is formed by connecting said at least one first electrode pad of said first semiconductor chip and said at least one first electrode pad of said second semiconductor chip by a bonding wire.

Claim 10 (previously presented): The semiconductor device as claimed in claim 9, wherein a plurality of said first electrode pads of said first semiconductor chip are provided and a plurality of said first electrode pads of said second semiconductor chip are provided; and said inductor is formed by alternately and sequentially connecting said first electrode pads of said first semiconductor chip and said first electrode pads of said second semiconductor chip by bonding wires.

Claims 11-12 (canceled).

Claim 13 (previously presented): The semiconductor device as claimed in claim 19, wherein the noise reduction condenser of said condenser chip is formed by a MOS capacity.

Claim 14 (previously presented): The semiconductor device as claimed in claim 20, wherein the noise reduction condenser of said condenser chip is formed by a MOS capacity.

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Claim 15 (previously presented): The semiconductor device as claimed in claim 21, wherein the noise reduction condenser of said condenser of said condenser chip is formed by a MOS capacity.

Claims 16-17 (canceled).

Claim 18 (previously presented): A semiconductor device comprising:
a semiconductor chip having a plurality of circuit blocks, a power supply line and a ground line, said power supply line and said ground line being connected to each of said plurality of circuit blocks; and

a condenser chip having a plurality of condensers,
wherein said condenser chip is stacked on said semiconductor chip, and
wherein said plurality of condensers are provided corresponding to the respective circuit blocks and each of said plurality of condensers connects said power supply line and said ground line to function as a noise reduction condenser.

Claim 19 (previously presented): A semiconductor device comprising:
a semiconductor chip having a plurality of circuit blocks, a power supply line and a ground line, said power supply line and said ground line being connected to each of said plurality of circuit blocks; and

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a plurality of condenser chips, each of which has a condenser,
wherein said condenser chip is stacked on said semiconductor chip, and
wherein said plurality of condensers are provided corresponding to the respective circuit
blocks and each of the condensers of said plurality of condenser chip connects said power supply
line and said ground line to function as a noise reduction condenser.

Claim 20 (currently amended): A semiconductor device comprising:
a semiconductor chip having a circuit block, a power supply line and a ground line, said
power supply line and said ground line being connected to said circuit block; and
a condenser chip having a condenser,
wherein said condenser chip is stacked on said semiconductor chip, and
wherein said semiconductor chip has ~~a first~~ an electrode pad provided on a connecting
line which connects said circuit block and one of said power supply line and said ground line,
and said condenser chip has ~~a second~~ an electrode pad connected to said condenser; and
wherein said [[first]] electrode pad ~~is pads are~~ electrically connected to ~~said second~~
~~electrode pad to each other~~ through a bonding wire so that said condenser function as a noise
reduction condenser.

Claim 21 (currently amended): A semiconductor device comprising:
a semiconductor chip having a circuit block, a power supply line and a ground line, said
power supply line and said ground line being connected to said circuit block; and
a condenser chip having a condenser,
wherein said condenser chip is stacked on said semiconductor chip,
wherein said semiconductor chip has ~~a first~~ an electrode pad provided on a connecting
line which connects said circuit block and one of said power supply line and said ground line,
and said condenser chip has ~~a second~~ an electrode pad connected to said condenser; and
wherein said [[first]] electrode ~~pad is~~ pads are electrically connected to ~~said second~~
~~electrode pad to each other~~ by flip chip bonding so that said condenser functions as a noise
reduction condenser.

Claim 22 (currently amended): The semiconductor device as claimed in claim 20,
wherein said semiconductor chip has ~~a third~~ another electrode pad ~~other than said first~~
~~electrode pad~~ connected to said circuit block, said [[third]] another electrode pad being separated
from said circuit block;
said condenser chip has ~~a fourth~~ another electrode pad ~~other than said second electrode~~
~~pad~~ connected to said condenser, said ~~fourth~~ another electrode pad being separated from said
condenser; and

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an inductor is formed by connecting said ~~third another~~ electrode pad, ~~said fourth electrode pad~~ pads and one of said power line and said ground line through a bonding wire to function as a noise reduction inductor.

Claim 23 (currently amended): The semiconductor device as claimed in claim 22, wherein a plurality of said ~~third another~~ electrode pads are provided for said semiconductor chip and a plurality of said ~~fourth another~~ electrode pads are provided for said condenser chip; and

 said inductor is formed by alternately and sequentially connecting said ~~third another~~ electrode pads provided for said semiconductor chip and said ~~fourth another~~ electrode pads provided for said condenser chip through bonding wires.

Claim 24 (previously presented): A semiconductor device as claimed in claim 18, wherein said power supply line and said ground line each have a ring shaped configuration,

 said plurality of circuit blocks are formed inside said ring shaped power supply line and ground line, and

 each of said plurality of condensers is connected to the corresponding circuit block through an electrode pad provided on a connecting line which connects the corresponding circuit block and one of said ring shaped power supply line and ground line.

Claim 25 (previously presented): The semiconductor device as claimed in claim 19, wherein said power supply line and said ground line have a ring shaped configuration, said plurality of circuit blocks are formed inside said ring shaped power supply line and said ground line, and

each of the condensers is connected to the corresponding circuit block through an electrode pad provided on a connecting line which connects the corresponding circuit block and one of said ring shaped power supply line and ground line.

Claim 26 (currently amended): The semiconductor device as claimed in claim 20, wherein said semiconductor chip has ~~a third second another~~ electrode pad ~~other than said first electrode pad~~ connected to said circuit block, said ~~third another~~ electrode pad being separated from said circuit block;

said condenser chip has ~~a fourth another~~ electrode pad ~~other than said second electrode pad~~ connected to the condenser, said ~~fourth another~~ electrode pad being separated from said condenser; and

an inductor is formed by connecting said ~~third another~~ electrode pad, ~~said fourth electrode pad pads~~ and one of said power supply line and said ground line through a bonding wire to function as a noise reduction inductor.

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Claim 27 (currently amended): The semiconductor device as claimed in claim 26,
wherein a plurality of said ~~third another~~ electrode pads are provided for said
semiconductor chip and a plurality of said ~~fourth another~~ electrode pads are provided for said
condenser chip; and

said inductor is formed by alternately and sequentially connecting said ~~third~~
~~another~~ electrode pads provided for said semiconductor chip and said ~~fourth another~~ electrode
pads provided for said condenser chip through bonding wires.